



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,469	06/28/2001	Bernard Y. Malo	702P03US-1	3315

7590 01/15/2003

Shapiro Cohen
Station D
P.O. Box 3440
Ottawa, ON K1P 6P1
CANADA

EXAMINER

KIANNI, KAVEH C

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,469

Applicant(s)

MALO, BERNARD Y.

Examiner

Kevin C Kianni

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feng et al. (US 6453095).

Regarding claim 1, Feng teaches a method of making a continuously chirped filter in a single Bragg grating in an optical waveguide material (shown at least in fig. 15, see abstract) including the steps of: disposing a strongly chirped phase mask (fig. 15, item 1510) placed between a light beam (fig. 15, item UV) and the optical waveguide material 1500, the light beam being capable of changing the effective index of refraction of the optical waveguide material (fig. 16c, item change in refractive index; col. 13, lines 40-54), and irradiating said optical waveguide material with said light beam non-uniformly through the phase mask (see col. 12, line 55-col. 13, line 4; the non-uniformity of this light is analogous to the applicant's definition of non-uniform radiation in page 4, last parag.), said irradiation producing a suitable filter response and required attenuation over the filter band (see col. 2, lines 25-42 and col. 10, lines 1-33).

However, Feng does not specifically teach wherein the above underlined chirped filter is a gain flattening filter. Nevertheless, Feng states that the filtering is used as means to control reflectivity/dispersion of wavelengths in the waveguide that filters output reflection wavelengths (see abstract and col. 7, line 64-col. 8 line 4) thereby producing constant index of refraction in the waveguide (see col. 14, lines 58-60), in which it is well known to those of ordinary skill in the art that such filtering of reflected wavelengths known as gain flattening filters, since such filters reduce the accumulated dispersion in a fiber link (col. 1, lines 557-61 and col. 10, lines 7-9 and see fig 11b with flattened bit error rate with respect to power; see also this conventional Gain flattening filter in references such as US 6289699, see abstract, and US 5903689, see col. 5, lines 57-62, provides herein as prior art).

Regarding claims 2-3 and 5, Feng further teaches the light beam is an ultraviolet light beam (see fig. 15, item UV); an amplitude mask is used to control the amount of light along the grating (col. 12, lines 55-65); which the optical waveguide material is an optical fiber 1500.

Regarding claim 4, a moveable slit is used to control the amount of light along the grating (see fig. 15, wherein the slotted amplitude mask is used for grating, see col. 14, lines 23-44, wherein sampling periods/slits are adjustable/movable; see also using this conventional movable slit in Bragg Grating in US 6269208 provided herein as prior art).

Regarding claims 6-7, Feng further the step of stabilizing said change in effective index of refraction in the optical waveguide material (see col. 2, lines 31-42); wherein the step of stabilizing said change in effective index of refraction is produced by annealing the optical waveguide material (see col. 2, lines 31-42; wherein the annealing process is analogous in applicant's disclosure page 7, 1st parag.).

Citation of Relevant Prior Art

3. Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

Cai et al. 6330383 teaches all claims

Hill et al. 5367588 teaches at least claim 1

Brennan, III et al. 6404956 teaches at least claim 1

Bhatia et al. 6269208 teaches movable slit

Kewitsch et al. 6289699

Starodubov 5881188

Heritage et al. 4655547

Heritage et al. 4746193

Painchaud et al. 5903689

These references are cited herein to show the relevance of the apparatus/methods taught within this reference as prior art.

Art Unit: 2877

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Cyrus Kianni whose telephone number is (703) 308-1216.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Frank Font, can be reached at (703) 308-4881.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-7722, (for formal communications intended for entry)

or:

(703) 308-7721, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")


Hand delivered responses should be brought to Crystal Plaza 4, 2021 South
Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

Kevin Cyrus Kianni
Patent Examiner
Group Art Unit 2877

Frank Font
Supervisory Patent Examiner
Group Art Unit 2877

January 8, 2003


Michael P. Stafira
Primary Patent Examiner
Technology Center 2800